

AVOCADO CULTURE IN NEW ZEALAND

Len Grey

In the early 1920's a number of avocado seeds were obtained from California and distributed to selected orchardists in each citrus growing district. My late father raised several of these seedlings and, after about 12 to 14 years, one tree began to produce fruit of good quality, which we marketed in Auckland for the first time in 1939. This fruit created a good impression, so that in 1940 we decided to import a number of varieties from California. These trees made such promising progress that during the 1940's we established further varieties until we were growing, on trial, some 20 varieties.

By selecting the most promising of these varieties we began raising our own seedlings, mostly Mexicola, and have gradually increased our plantings until we now have some 600 trees, to constitute, at present, New Zealand's only commercial planting. Our main varieties are Fuerte, Nabal and Hass, with lesser numbers of Hazzard, Zutano, Hellen and Mary Martin. At present we are top working a number of varieties which we consider to be inferior, either in quality or cropping ability or, in the case of Linda, having too large a fruit. These are all being worked over to Hass. We have found the Hass to be a good consistent cropper, with fruit of very high quality, and a tree which is compact and tidy in growth.

In 1963 we produced a bumper crop on most of our bearing trees, many trees of 10 to 12 years carrying over 1,000 fruit, while one huge Fuerte, 17 years of age, produced 2,300 marketable fruit. We have found most varieties tending to alternate bearing, or perhaps one heavy crop in three. Hass shows promising signs of being an exception, while it has the added advantage of holding its fruit in a mature state for a long period. I have held fruit ripe on the tree for up to 12 months. Most of our trees are planted alternately with citrus, and with the eventual removal of the citrus will be spaced at 42 feet, with another tree staggered in the center of each square.

As the avocado is not widely known in New Zealand we are giving it more publicity, as our quantities increase, by exhibiting at horticultural shows, demonstrating the uses of the fruit, and enclosing recipe leaflets and shop posters in each case marketed.

Our cultural practices are: Shallow summer cultivation, autumn and winter mowing of volunteer weed and grass growth. We do not use irrigation. Our average rainfall is 38 inches, over half of which falls in the winter months May to August. We do not use frost fighting equipment, and rarely suffer any severe damage from frost. The main frost risk is to very small trees, to which we apply a light screen for the first winter, and to trees which, through carrying an exceptionally heavy crop, are sparsely foliated. As a result frost damage has occurred on the fruit stems, causing fruit drop on the outside of the tree.

When propping has been necessary, we have used bamboo poles, lashed on with

strong twine, and this has proved a simple and effective method of preventing breaking of trees. For shelter—a belt of 30-foot bamboo on the southern side only. We will have to consider additional shelter from prevailing northerlies.

I am very much indebted to Dr. Robert W. Hodgson and Dr Art Schroeder of U.C.L.A. for their valuable advice over the years on this project Without their assistance I am sure we would not have been so successful in establishing the avocado on a commercial basis here